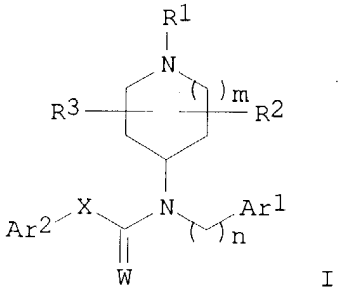
STN structure Search 9.3.04

=> d ibib abs hitstr 1-4

L4 ANSWER 1 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:451629 CAPLUS
DOCUMENT NUMBER: 141:23543
TITLE: Preparation of N-substituted piperidine derivatives as serotonin receptor agents
INVENTOR(S): Andersson, Carl-Magnus; Schlienger, Nathalie; Fejzic, Alma; Hansen, Eva Louise; Pawlas, Jan
PATENT ASSIGNEE(S): Swed.
SOURCE: U.S. Pat. Appl. Publ., 44 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | | DATE |
|---|---|---|---|---|---|
| US 2004106600 | A1 | 20040603 | US 2003-601070 | | 20030620 |
| PRIORITY APPLN. INFO.: | | | DK 2002-973 | A | 20020624 |
| | | | US 2002-391269P | P | 20020624 |

OTHER SOURCE(S): MARPAT 141:23543
GI



I

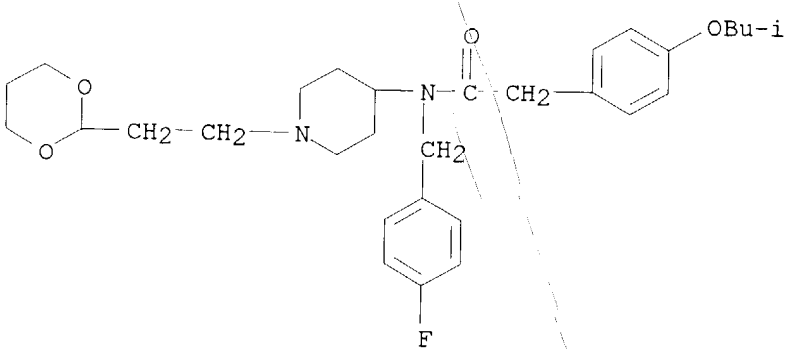
AB Disclosed herein are compds. of formula (I), pharmaceutically acceptable salts, amides, esters, or prodrugs thereof [whewrein R1 = each (un)substituted heterocyclyl or heterocyclyl-C1-6 alkyl; R2, R3 = H, C1-6 alkyl, or halogen or such that R2 together with R3 forms a ring; m = 0, 1, 2; n = 1, 2, 3; Ar1 = each (un)substituted aryl or heteroaryl; W = O, S; X = each (un)substituted methylene, ethylene, propylene, or vinylene, CH2NR (wherein R = H, C1-6 alkyl); Ar2 = each (un)substituted aryl or heteroaryl]. Also disclosed are. (1) methods of inhibiting an activity of a monoamine receptor comprising contacting the monoamine receptor or a system containing the monoamine receptor with an effective amount of one or more of the compds. of formula I, (2) methods of inhibiting an activation of a monoamine receptor comprising contacting the monoamine receptor or a system containing the monoamine receptor with an effective amount of one or more of the compds. of formula I, and (3) methods of treating a disease condition associated with a monoamine receptor, in particular serotonin receptor 5-HT2A subclass. The disease condition is selected from (a) the group consisting of schizophrenia, schizoaffective disorders, psychosis, drug induced psychosis, and side effects observed with the treatment of chronic neurodegenerative disorders with a selective serotonin reuptake inhibitor (SSRI), wherein said neurodegenerative disorder is selected from

Alzheimer's disease, Parkinson's disease, Lewy body dementia, frontotemporal dementia, spinocerebellar atrophy, and Huntington's disease, and (b) the group consisting of Reynaud's Phenomena, migraine, hypertension, thrombosis, vasospasm, ischemia, depression, anxiety, motor tics, Tourette's syndrome, dyskinesias, on/off phenomena, tremor, rigidity, bradykinesia, psychomotor slowing, addiction, including alc. addiction, opioid addiction, and nicotine addiction, sleep disorders, appetite disorders, and decreases in libido and ejaculatory problems. Thus, N-(4-fluorobenzyl)-2-(4-isobutoxyphenyl)-N-[1-[3-(4-(S)-isopropyl-2-oxooxazolidin-3-yl)propyl]piperidin-4-yl]acetamide oxalate, which was prepared by alkylation of N-(4-fluorobenzyl)-2-(4-isobutoxyphenyl)-N-piperidin-4-ylacetamide with (4S)-3-(3-chloropropyl)-4-isopropyloxazolidin-2-one, inhibited 5-HT2A receptor by 104% in a receptor selection and amplification (R-SAT) assay using NIH3T3 cells.

IT **639861-75-9P**, N-[1-[2-(1,3-Dioxan-2-yl)ethyl]piperidin-4-yl]-N-(4-fluorobenzyl)-2-(4-isobutoxyphenyl)acetamide **639862-90-1P**, N-[1-[2-(1,3-Dioxan-2-yl)ethyl]piperidin-4-yl]-N-(4-fluorobenzyl)-2-(4-isopropylphenyl)acetamide **639862-92-3P**, N-[1-[2-(1,3-Dioxan-2-yl)ethyl]piperidin-4-yl]-N-(4-fluorobenzyl)-2-(4-trifluoromethoxyphenyl)acetamide **639863-26-6P**, N-(4-Fluorobenzyl)-2-(4-isobutoxyphenyl)-N-[1-[3-(2-oxopiperidin-1-yl)propyl]piperidin-4-yl]acetamide
RL: PAC (Pharmacological activity); RCT (Reactant); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); RACT (Reactant or reagent); USES (Uses)
(intermediate; preparation of N-substituted piperidine derivs. as serotonin receptor inhibitors for treating symptoms, diseases and disorders associated with monoamine receptors, including serotonin receptors)

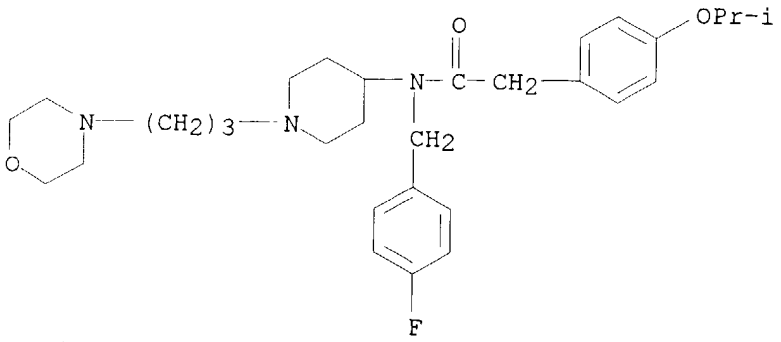
RN 639861-75-9 CAPLUS

CN Benzeneacetamide, N-[1-[2-(1,3-dioxan-2-yl)ethyl]-4-piperidinyl]-N-[(4-fluorophenyl)methyl]-4-(2-methylpropoxy)- (9CI) (CA INDEX NAME)




RN 639862-90-1 CAPLUS

CN Benzeneacetamide, N-[1-[2-(1,3-dioxan-2-yl)ethyl]-4-piperidinyl]-N-[(4-fluorophenyl)methyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)



L4 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2004:2854 CAPLUS
DOCUMENT NUMBER: 140:77030
TITLE: Preparation of 1,4-disubstituted piperidines as serotonin 5-HT2A inverse agonists.
INVENTOR(S): Andersson, Carl-magnus; Schlienger, Nathalie; Fejzic, Alma; Hansen, Eva Louise; Pawlas, Jan
PATENT ASSIGNEE(S): Acadia Pharmaceuticals Inc., USA
SOURCE: PCT Int. Appl., 103 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2004000808 | A2 | 20031231 | WO 2003-US19797 | 20030620 |
| WO 2004000808 | A3 | 20040325 | | |

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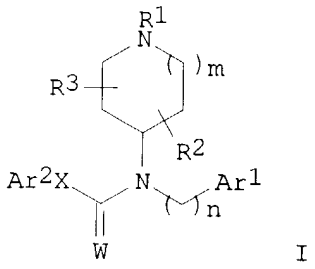
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-391269P P 20020624
OTHER SOURCE(S): MARPAT 140:77030
GI



I

AB Title compds. [I; R1 = (substituted) heterocyclyl, heterocyclylalkyl; R2, R3 = H, alkyl, halo; R2R3 = atoms to form a ring; m = 0-2; n = 1-3; Ar1 = (substituted) aryl, heteroaryl; W = O, S; X = (substituted) methylene, ethylene, propylene, vinylene, CH2N(Rn); Rn = H, alkyl; Ar2 = (substituted) aryl, heteroaryl], were prepared Thus, a mixture of N-(4-fluorobenyzl)-N-(piperidin-4-yl)-2-(4-isobutoxyphenyl)acetamide, K2CO3, NaI, and (4S)-3-(3-chloropropyl)-4-isopropyloxazolidinon-2-one were stirred overnight to give 71% N-(4-fluorobenzyl)-2-(4-isobutoxyphenyl)-N-[1-[3-(4-(S)-isopropyl-2-oxooxazolidin-3-yl)propyl]piperidin-4-yl]acetamide oxalate (117NLS01). The latter showed pIC50 = 9.7 for repression of 5-HT2A receptor activity.

IT **639861-39-5P 639861-40-8P 639861-42-0P**
**639861-43-1P 639861-44-2P 639861-45-3P**
**639861-46-4P 639861-47-5P 639861-50-0P**
**639861-53-3P 639861-56-6P 639861-59-9P**
**639861-62-4P 639861-63-5P 639861-64-6P**
**639861-67-9P 639861-70-4P 639861-73-7P**
**639861-76-0P 639861-79-3P 639861-82-8P**
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**639861-97-5P 639861-99-7P 639862-04-7P**
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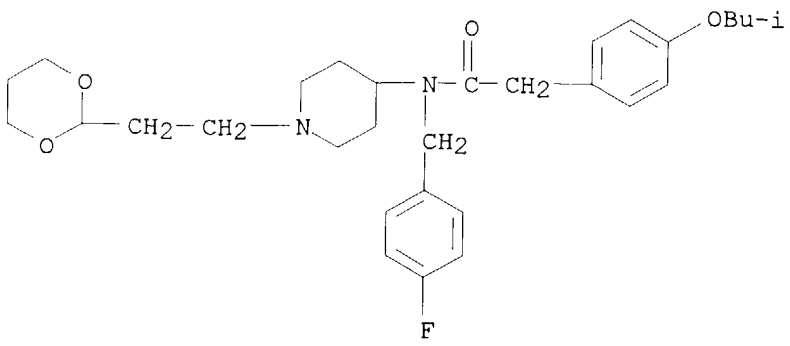
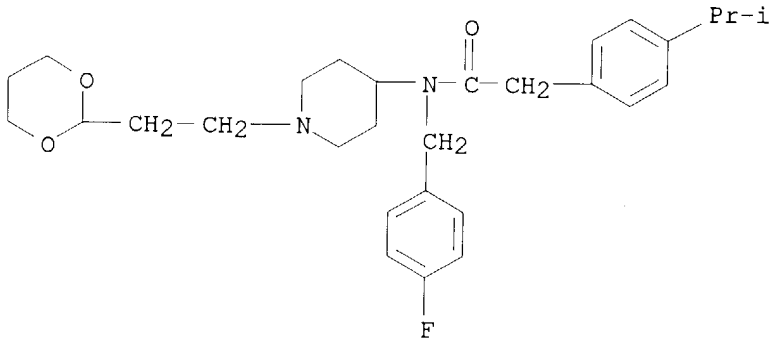
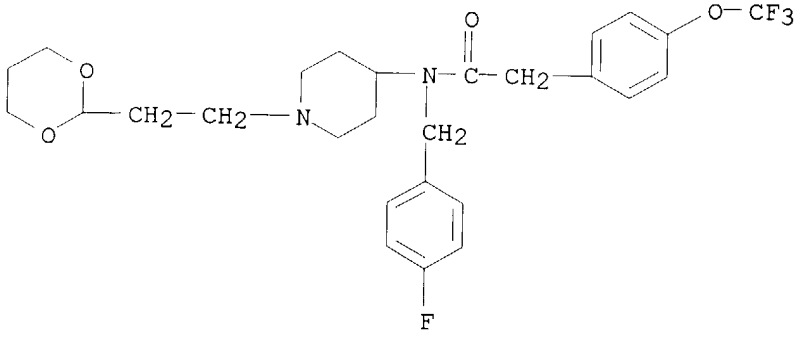



RN 639862-90-1 CAPLUS
CN Benzeneacetamide, N-[1-[2-(1,3-dioxan-2-yl)ethyl]-4-piperidinyl]-N-[(4-fluorophenyl)methyl]-4-(1-methylethyl)- (9CI) (CA INDEX NAME)




RN 639862-92-3 CAPLUS
CN Benzeneacetamide, N-[1-[2-(1,3-dioxan-2-yl)ethyl]-4-piperidinyl]-N-[(4-fluorophenyl)methyl]-4-(trifluoromethoxy)- (9CI) (CA INDEX NAME)




L4 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:836853 CAPLUS
DOCUMENT NUMBER: 139:337978
TITLE: Preparation of N-substituted pyridinone and pyrimidinone derivatives for use as Lp-PLA2 inhibitors in the treatment of atherosclerosis
INVENTOR(S): Leach, Colin Andrew; Smith, Stephen Allan

PATENT ASSIGNEE(S): Glaxo Group Limited, UK
SOURCE: PCT Int. Appl., 38 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
|---|---|---|---|---|
| WO 2003086400 | A1 | 20031023 | WO 2003-GB1544 | 20030410 |

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RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: GB 2002-8279 A 20020410
OTHER SOURCE(S): MARPAT 139:337978
GI

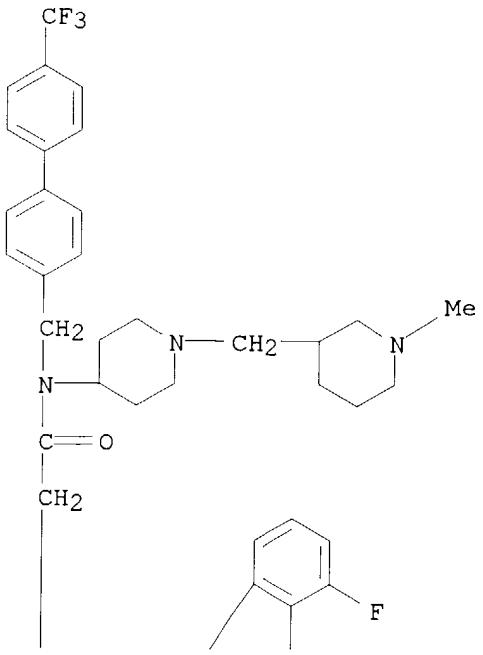
* STRUCTURE DIAGRAM TOO LARGE FOR DISPLAY - AVAILABLE VIA OFFLINE PRINT *

AB The title compds. [I; R1 = (un)substituted aryl; R2 = halo, alkyl, alkoxy, etc.; R3 = H, halo, alkyl, hydroxyalkyl; R2 and R3 together with the pyridone or pyrimidone ring carbons to which they are attached form (un)substituted fused 5-6 membered carbocyclic ring, fused benzo or heteroaryl ring; R4 = alkyl substituted by 5-7 membered saturated heterocyclyl comprising N and optionally O or S; R5 = (un)substituted (hetero)aryl; R6 = (un)substituted (hetero)aryl; X = CH, N; Y = alkylene, CH:CH, (CH2)nS; n = 1-3] that are inhibitors of the enzyme Lp-PLA2 and are of use in therapy, in particular for treating atherosclerosis, were prepared Thus, amidation of 2-[2-(2,3-difluorobenzylthio)-4-oxo-4H-quinolin-1-yl]acetic acid with N-(1-thiazol-2-ylmethylpiperidin-4-yl)-4'-trifluoromethylbiphen-4-ylmethylamine (prepns. given) afforded the quinolinone II. The exemplified compds. I showed IC50 values in the range <0.1 to 100 nM against Lp-PLA2.

IT **615577-27-0P 615577-28-1P**
RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(preparation of pyridinone and pyrimidinone derivs. for use as Lp-PLA2 inhibitors in the treatment of atherosclerosis)

RN 615577-27-0 CAPLUS
CN 1(4H)-Quinolineacetamide, 2-[[(2,3-difluorophenyl)methyl]thio]-N-[1-[(1-methyl-3-piperidinyl)methyl]-4-piperidinyl]-4-oxo-N-[[4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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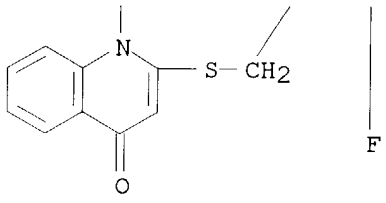
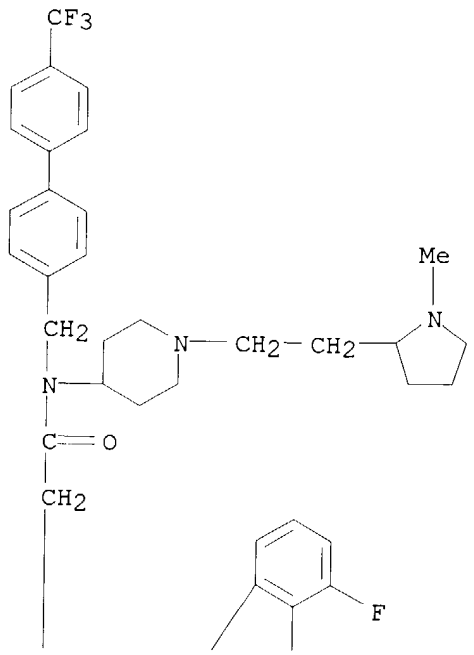


RN 615577-28-1 CAPLUS
CN 1(4H)-Quinolineacetamide, 2-[[(2,3-difluorophenyl)methyl]thio]-N-[1-[2-(1-methyl-2-pyrrolidinyl)ethyl]-4-piperidinyl]-4-oxo-N-[[4'-(trifluoromethyl)[1,1'-biphenyl]-4-yl]methyl]- (9CI) (CA INDEX NAME)

PAGE 1-A



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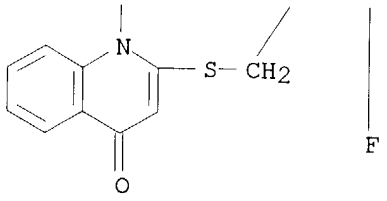

REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L4 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2001:676749 CAPLUS
DOCUMENT NUMBER: 135:242140
TITLE: Preparation of N-piperidinyl-N-alkyl-acetamides and N,N,N'-substituted ureas as 5-HT2A inverse agonists/antagonists
INVENTOR(S): Andersson, Carl M.; Croston, Glenn; Hansen, E. L.; Uldam, A. K.
PATENT ASSIGNEE(S): Acadia Pharmaceuticals, Inc., USA
SOURCE: PCT Int. Appl., 150 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

| PATENT NO. | KIND | DATE | APPLICATION NO. | DATE |
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| WO 2001066521 | | A1 | 20010913 | WO 2001-US7187 | 20010306 |
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| RW: | GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG | | | | |
| US 2002004513 | | A1 | 20020110 | US 2001-800096 | 20010306 |
| EP 1263729 | | A1 | 20021211 | EP 2001-914716 | 20010306 |
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| JP 2003531829 | | T2 | 20031028 | JP 2001-565339 | 20010306 |
| BR 2001008977 | | A | 20040106 | BR 2001-8977 | 20010306 |
| ZA 2002005902 | | A | 20031023 | ZA 2002-5902 | 20020723 |
| US 2003220316 | | A1 | 20031127 | US 2003-409782 | 20030407 |
| US 6756393 | | B2 | 20040629 | | |

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| PRIORITY APPLN. INFO.: | US 2000-187289P | P | 20000306 |
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| | WO 2001-US7187 | W | 20010306 |

OTHER SOURCE(S): MARPAT 135:242140


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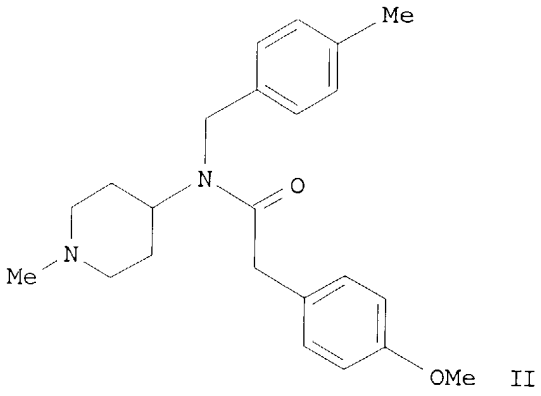



II

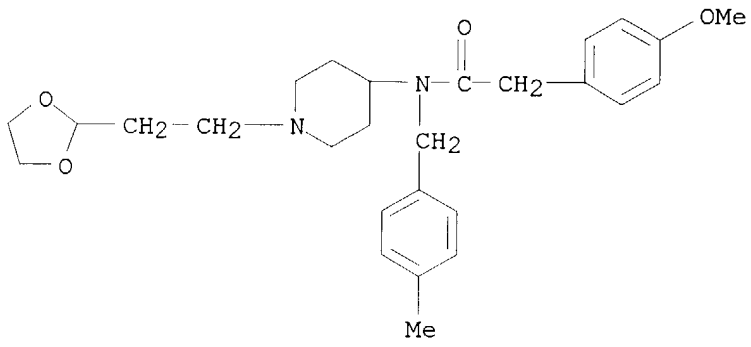

AB Title compds. Ar1-Y2-Y1-N(Z)-C:W-X1-X2-Ar2 [Z = NR-substituted piperidinyl, tropanyl,azetidinyl, etc.; R = H, cyclic/straight-chain acyclic organyl group, hydroxyalkyl, aminoalkyl, aralkyl or heteroaralkyl group; X1 = CH2, vinylene, NH or N-alkyl; X2 = CH2, or, when X1 = CH2 or vinylene, X2 = CH2 or a bond; or when X1 is CH2, X2 = O, S, NH, N(lower alkyl) or a bond; Y1 = CH2 and Y2 = CH2, vinylene, ethylene, propylene, bond; or Y1 = bond and Y2 = vinylene; or Y1 = ethylene and Y2 = O, S, NH, N(lower alkyl); Ar1 and Ar2 = (un)substituted (hetero)aryl provided that Ar1 and Ar2 are not simultaneously phenyl; W = O, S; I] were prepared Examples include over 130 compds. synthesized, 5 serotonin receptor binding assays and 3 in-vivo models. For instance, 4-methylbenzylamine was reductively alkylated with 1-methyl-4-piperidone (MeOH, HOAc, NaCNBH3, 20 h., room temperature). The resulting amine was alkylated with 4-methoxyphenylacetyl chloride (DCM, 4 h., room temperature) to give II, isolated as the hydrochloride salt and subsequently purified by chromatog. Many of the examples had pIC50 (-log IC50) = 7.8 - 9.0 for HT2A. I are

used for the treatment of disease in which modification of serotonergic receptor activity has a beneficial effect.

IT **359881-45-1P**
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)
(drug; preparation of N-piperidinyl-N-alkyl-aryl-acetamides and N,N,N'-substituted ureas as 5-HT2A inverse agonists)

RN 359881-45-1 CAPLUS

CN Benzeneacetamide, N-[1-[2-(1,3-dioxolan-2-yl)ethyl]-4-piperidinyl]-4-methoxy-N-[(4-methylphenyl)methyl]- (9CI) (CA INDEX NAME)




REFERENCE COUNT: 2 THERE ARE 2 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

=> d his

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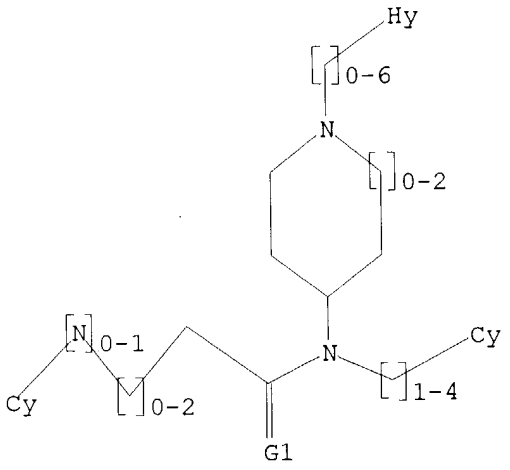
FILE 'REGISTRY' ENTERED AT 10:16:27 ON 03 SEP 2004
L1 STRUCTURE UPLOADED
L2 0 S L1
L3 205 S L1 FULL

FILE 'CAPLUS' ENTERED AT 10:17:32 ON 03 SEP 2004
L4 4 S L3

=> d l1
L1 HAS NO ANSWERS
L1 STR




G1 O,S

Structure attributes must be viewed using STN Express query preparation.

=>